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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,417	02/22/2002	Carl Duane Williams	ERLG.P-019	9906
21121	7590	02/18/2004	EXAMINER	
OPPEDAHL AND LARSON LLP P O BOX 5068 DILLON, CO 80435-5068			EDWARDS, ANTHONY Q	
			ART UNIT	PAPER NUMBER
			2835	
DATE MAILED: 02/18/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/080,417

Applicant(s)

WILLIAMS ET AL.

Examiner

Anthony Q. Edwards

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-9 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,483,107 to Rabinovitz et al. in view of U.S. Patent No. 6,129,440 to Reynolds.

Referring to claim 1, Rabinovitz et al. disclose a disk drive carrier system (see Fig. 26) comprising a plurality of disk drive carriers and a shelf, the shelf defining a plurality of parallel slots shaped to receive the disk drive carriers, each disk drive carrier carrying a disk drive (see Fig. 16) and having a first electrical connector on a first edge of the carrier, said first edge defining an insertion direction for insertion of the carrier into the shelf, the shelf inherently comprising a plurality of second electrical connectors each disposed to mate with the first electrical connector of a carrier, each disk drive carrier having a first locking part (223) movable between a first position (e.g., locked) and a second position (e.g., unlocked); the system further comprising a plurality of second locking features (not shown) each disposed to engage with the first locking part of a carrier if in said first (i.e., locked) position. See Figs. 6 and 11 for open and closed positions respectively.

Rabinovitz et al. also disclose each said carrier further comprising a bezel (18) visible when the first electrical connector of said carrier is mated with said second electrical connector

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(see Figs. 11 and 26), said bezel defining an opening (not numbered), each said carrier further comprising the first locking part (223) rotatable about an axis between said first and second positions (see col. 16, lines 21-28), said first locking part rotation axis being parallel with said insertion direction, a portion of said first locking part (223) visible through said opening (see Figs. 14 and 15), the visible portion of the first locking part shaped to present different appearances when in said first and second positions (see Figs. 11 and 12, showing an “S” shaped “appearance” that can represent a locked and unlocked position).

Furthermore, Rabinovitz et al. also disclose each said carrier further comprising a first light source (115) positioned with respect to a feature (222) of the first locking part (223) such that said first light source is juxtaposed with said feature (222) in one of said first (e.g., locked) and second (e.g., unlocked) positions but not in another of said first and second positions. See Fig. 11, which shows the carrier in a first or locked position, in which the first light source (13/115) and the feature (222) are juxtaposed, as well as Fig. 6, showing the carrier in a second or unlocked position in which the first light source (13/115) and the feature (222) are not juxtaposed.

Rabinovitz et al. does not specifically disclose the first locking part (223) being non-opaque. Rabinovitz et al. does, however, disclose that a customer may choose the color and texture of a plastic insert (22) formed in the same area as the first locking part (223). See col. 15, lines 15-19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the first locking part of Rabinovitz et al. to include a non-opaque material, since it has been held to be within the general skill of a worker in the art to select a

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known material on the basis of its suitability for the intended use as a matter of obvious design choice (*see In re Leshin*, 125 USPQ 146.)

Likewise, Rabinovitz et al. does not specifically disclose light from the first light source (13/115) being emitted from the visible portion of the first locking part. Reynolds discloses an L-shaped light pipe (29) formed in a switch/status indicator (28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the feature (222) of the disk drive carrier of Rabinovitz et al. to include an L-shaped light pipe, as taught by Reynolds to maintain illumination of the handle of Rabinovitz et al. while the same on in an unlocked position.

Referring to claim 3, Rabinovitz et al. in view of Reynolds disclose a disk drive carrier system, wherein the first locking part (223) rotates through substantially ninety degrees (see Figs. 11 and 12, showing an “S” shaped “appearance” that can represent a locked and unlocked position.

Referring to claims 4 and 5, Rabinovitz et al. in view of Reynolds disclose a disk drive carrier system, wherein the first locking part is transparent or translucent, respectively. See col. 15, lines 15-19.

Referring to claims 6 and 9, the recited method steps are inherently necessitated by the apparatus structure as disclosed by Rabinovitz et al. in view of Reynolds (see Figs. 6, 11, 12, 14 and 26 and column 16, lines 3-37), including rotating the first locking part (223) from the first to the second position and removing the carrier from the slot of the shelf.

Referring to claims 7 and 8, the recited method steps are also inherently necessitated by the apparatus structure as disclosed by Rabinovitz et al. in view of Reynolds, including inserting

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the carrier into a respective slot of the shelf and rotating the first locking part (223) from the second position to the first position.

Allowable Subject Matter

Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: It would not have been obvious at the time of the invention to provide a disk drive carrier system, further comprising a second light source positioned with respect to the feature of the first locking part, such that said second light source is juxtaposed with said feature in the other of said first and second positions but not in the one of said first and second positions, whereby when the second light source is juxtaposed, light from the second light source is emitted from the visible portion of the first locking part. These features, in combination with the rest of the elements or steps, are not taught or suggested by the prior art references.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 6,431,718 to Gamble et al. disclose an interconnector and light pipe guide for disk drive and carrier; and U.S. Patent No. 6,424,523 to Curtis et al. disclose a pluggable drive carrier assembly.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is (571) 272-2042. The examiner can normally be reached on M-F (7:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 4, 2004
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